



## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

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<b>(21) International Application Number:</b> PCT/US95/16159 <b>(22) International Filing Date:</b> 8 December 1995 (08.12.95)  <b>(30) Priority Data:</b> 08/352,400 8 December 1994 (08.12.94) US  <b>(71) Applicant:</b> HYPERION CATALYSIS INTERNATIONAL, INC. [US/US]; 38 Smith Place, Cambridge, MA 02138 (US).  <b>(72) Inventors:</b> FISHER, Alan; 80 Antrim Street, Cambridge, MA 02139 (US). HOCH, Robert; R.R. 1, Box 422, Hensonville, NY 12439 (US). MOY, David; 21 Edward Drive, Winchester, MA 01890 (US). NIU, Chunming; 104 Conwell Avenue, Somerville, MA 02144 (US). OGATA, Naoya; Sophia University, Dept. of Chemistry, 7-1, Kioicho, Chiyoda-ku, Tokyo (JP). TENNENT, Howard; 301 Chandler Mill Road, Kennett Square, PA 19348 (US).  <b>(74) Agents:</b> EVANS, Barry et al.; Curtis, Morris & Safford, P.C., 530 Fifth Avenue, New York, NY 10036 (US).		<b>(81) Designated States:</b> AU, BR, CA, JP, KR, MX, RU, European patent (AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE).  <b>Published</b> <i>With international search report. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i>
<b>(54) Title:</b> FUNCTIONALIZED FIBRILS  <b>(57) Abstract</b>  Graphitic nanotubes, which includes tubular fullerenes (commonly called "buckytubes") and fibrils, which are functionalized by chemical substitution or by adsorption of functional moieties. More specifically the invention relates to graphitic nanotubes which are uniformly or non-uniformly substituted with chemical moieties or upon which certain cyclic compounds are adsorbed and to complex structures comprised of such functionalized fibrils linked to one another. The invention also relates to methods of introducing functional groups onto the surface of such fibrils.		